UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/126,884	07/31/1998	MICHAEL C. BERTRAM	533/133	9408

26291	7590	06/23/2005

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EXAMINER
NGUYEN, BRIAN D

ART UNIT	PAPER NUMBER
2661	

DATE MAILED: 06/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/126,884	BERTRAM ET AL.
	Examiner	**Art Unit**	
	Brian D. Nguyen	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>06 May 2005</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5-10,12 and 16-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-10,12 and 16-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 July 1998* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All   b)☐ Some *   c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2.   Claims 1-3, 5-10, 12, and 16-29 are rejected under 35 U.S.C. 112, first paragraph, as

failing to comply with the enablement requirement. The claim(s) contains subject matter which

was not described in the specification in such a way as to enable one skilled in the art to which it

pertains, or with which it is most nearly connected, to make and/or use the invention. The

limitation: "a modified packet uses a matching time stamp of said received transport stream" in

claims 1, 7, 12, and 27 was not described in the specification.

3.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4.   Claims 8, 16-17, 23-25, and 27-29 are rejected under 35 U.S.C. 112, second paragraph, as

being indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

        Claim 8, line 2, "CLK" is not defined.

        Claim 16 recites the limitation "said at least one encoded program stream" in line 5.

There is insufficient antecedent basis for this limitation in the claim.

        Claim 23 recites the limitation "said processed output transport stream" in line 5. There

is insufficient antecedent basis for this limitation in the claim.

Claim 27 recites the limitation "said common time base" and "said periodically inserted

time stamps" in line 17 and "said received transport stream" in lines 18 & 19. There are

insufficient antecedent basis for these limitations in the claim. "said slotted transport stream" in

line 16 is unclear if the applicant is referring to "a slotted transport stream" mentioned in line 11

or lines 15-16.

Claim 28 recites the limitation "said corresponding time slot" in line 1. There is

insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

6.   Claims 1-3, 5-10, and 12-29 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Slattery (6,246,701) in view of Gardner et al (6,327,275).

Regarding claim 1, Slattery discloses a method for processing a transport stream (TS1,

TS2, TS3 of figure 1) comprising a plurality of time slots for transporting therein respective

programs having a common time base (see col. 2, lines 7-10) indicated by periodically inserted

time stamps (col. 3, lines 29-43) comprising modifying packets associated with a desired time

slot of a received transport stream to produce an output transport stream (col. 4, line 62-col. 5,

line 2) and transmitting the output transport stream (TS 4, TS5), wherein the transmitted output

transport stream includes respective modified programs having the common time base indicated

by the periodically inserted time stamps provided by the received transport stream (see abstract;

Fig. 1; col. 3, lines 12-14; col. 5, lines 48-50 & 62-65; col. 6, lines 11-16; col. 9, lines 26-30; col.

9, line 47-col. 10, line 7; col. 10, lines 27-44; and col. 40, lines 28-30). Slattery implicitly

discloses a matching time stamp (...match a time...) in col. 11, lines 49-64). Slattery does not

specifically show the relative position (matching time stamp) of the modified packet in the

received transport stream and the output transport stream. However, Gardner explicitly shows the

relative position of the modified packet in the received transport stream and the output transport

stream (see col. 4, lines 30-59 and col. 5, lines 5-13 where B packet is replaced by null packet "--

" and the timing of null packet matches the timing of B packet in the received transport stream).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the

invention was made to a use a matching time stamp of the received transport stream as taught by

Gardner in the system of Slattery with the motivation being to maintain the timing of the packets

in the received transport stream.

Regarding claims 2-3 and 5-6, Slattery further discloses examining and replacing NULL

packets/programs with replacement packets/programs by inserting the replacement

packets/programs into an output transport stream (see abstract; Fig. 1; col. 3, lines 12-14; col. 5,

lines 48-50; col. 9, line 47-col. 10, line 7; col. 10, lines 27-44; and col. 40, lines 28-30).

Regarding claims 7-10 and 26, Slattery discloses an apparatus for processing a received

transport stream (TS1-3 of figure 1) comprising N time slots for transporting therein N respective

programs having a common time base (col. 2, lines 7-10) indicated by periodically inserted time

stamps comprising a transport clock source; N transport encoders (see col. 3, lines 22-29); a

multiplexer (30 of figure 1) for receiving and modifying packets associated with a desired time

slot of one or more transport encoded program streams. The multiplexer producing a processed

transport stream (TS4-5), wherein the processed transport stream includes respective modified

programs having the common time base indicated by the periodically inserted time stamps

provided by the received transport stream and a file server coupled between the multiplexer and

the N transport encoders (see abstract; Fig. 1; col. 3, lines 12-14; col. 5, lines 48-50; col. 9, lines

26-30; col. 9, line 47-col. 10, line 7; col. 10, lines 27-44; col. 29, line 41-col. 30, line 7; and col.

40, lines 28-30). Slattery implicitly discloses a frequency divider to divide a timing signal CLK

from the transport clock source into N timing signals so as the bit rate of the slotted transport

stream will be equal to the sum of the bit rates of the N slots. Slattery also implicitly discloses a

matching time stamp (...match a time...) in col. 11, lines 49-64). Slattery does not specifically

show the relative position (matching time stamp) of the modified packet in the received transport

stream and the output transport stream. However, Gardner explicitly shows the relative position

of the modified packet in the received transport stream and the output transport stream (see col.

4, lines 30-59 and col. 5, lines 5-13 where B packet is replaced by null packet "--" and the timing

of null packet matches the timing of B packet in the received transport stream). Therefore, it

would have been obvious to a person of ordinary skill in the art at the time the invention was

made to a use a matching time stamp of the received transport stream as taught by Gardner in the

system of Slattery with the motivation being to maintain the timing of the packets in the received

transport stream.

Regarding claim 12, Slattery discloses an apparatus for processing a received transport

stream (TS1-3) comprising a plurality of time slots for transporting therein a respective plurality

of programs having a common time base (col. 2, lines 7-10) indicated by periodically inserted

time stamps comprising a transport clock source, a plurality of encoder (col. 3, lines 21-32) for

receiving and encoding program streams to produce a respective encoded program stream (TS4-

5), each of the encoded program streams being coupled to a switch (30) via a respective buffer

memory (col. 6, lines 40-48), the switch selectively coupling program stream transport packets

from the buffer memories for modifying packets associated with a desired time slot to produce a

slotted transport stream, wherein the slotted transport stream includes respective modified

programs having the common time base indicated by the periodically inserted time stamps

provided by the received transport stream (see abstract; Fig. 1; col. 3, lines 12-14; col. 5, lines

48-50; col. 9, lines 26-30; col. 9, line 47-col. 10, line 7; col. 10, lines 27-44; col. 29, line 41-col.

30, line 7; and col. 40, lines 28-30). Slattery implicitly discloses a frequency divider to divide a

timing signal CLK from the transport clock source into N timing signals so as the bit rate of the

slotted transport stream will be equal to the sum of the bit rates of the N slots. Slattery also

implicitly discloses a matching time stamp (...match a time...) in col. 11, lines 49-64). Slattery

does not specifically show the relative position (matching time stamp) of the modified packet in

the received transport stream and the output transport stream. However, Gardner explicitly shows

the relative position of the modified packet in the received transport stream and the output

transport stream (see col. 4, lines 30-59 and col. 5, lines 5-13 where B packet is replaced by null

packet "--" and the timing of null packet matches the timing of B packet in the received transport

stream). Therefore, it would have been obvious to a person of ordinary skill in the art at the time

the invention was made to a use a matching time stamp of the received transport stream as taught

by Gardner in the system of Slattery with the motivation being to maintain the timing of the

packets in the received transport stream.

Regarding claims 13, 16-17, and 21-22, Slattery further discloses a file server (40) for storing encoded program streams and selectively providing at least one encoded program stream to the switch (see Figure 1).

Regarding claims 14-15, 18-20, and 23-25, Slattery further discloses NULL transport packets, adding and deleting NULL transport packets and program packets (see elements 50 & 60 of Figure 1; col. 4, lines 62-67; col. 5, lines 48-50; and col. 10, lines 32-40).

Regarding claims 27-29, claims 27-29 are apparatus claims that includes limitations described in apparatus claims 12 and 18 (note that claims 27-29 does not include a transport clock source as described in claim 12 and does not claim bitrate as described in claim 18). Therefore, they are subject to the same rejection.

Response to Arguments

7.   Applicant's arguments filed 5/6/05 have been fully considered but they are not persuasive.

The applicant argued that the primary issue with regard to the cited art is whether the cited art sufficiently discloses that a modified packet that is part of a transmitted output transport stream uses a matching time stamp of the received transport stream. However, a matching time stamp was not described in the specification. The examiner uses the drawings; specifically figures 4 and 6, for the claimed limitation interpretation. Both Slattery and Gardner disclose replacing one program or a null program by another program while maintaining relative positions between the programs in the output transport stream.
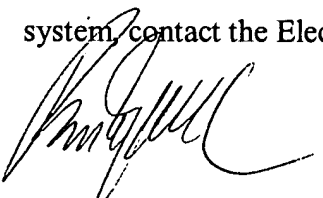
Conclusion

8.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Brian D. Nguyen whose telephone number is (571) 272-3084.

The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

6/13/05

**BRIAN NGUYEN
PRIMARY EXAMINER**